

# REPORT / RECOMMENDATION



**To:** MAYOR AND COUNCIL

**Agenda Item #:** IX.C

**From:** Ross Bintner P.E., Environmental Engineer

**Date:** November 5, 2012

**Subject:** Energy and Environment Commission Advisory Communication

|                    |                                     |
|--------------------|-------------------------------------|
| <b>Action</b>      | <input type="checkbox"/>            |
| <b>Discussion</b>  | <input type="checkbox"/>            |
| <b>Information</b> | <input checked="" type="checkbox"/> |

**Action Requested:**

No specific action requested.

**Information / Background:**

The attached advisory communication was drafted by the EEC to provide information and make a recommendation to the City Council.

## **Edina Energy and Environment Commission Advisory Communication**

**Date:** 10/22/12

**Subject:** Re-commissioned Golf Dome

**Attachments:** (1000 BTU/SF Annual energy use graphs for all city facilities, and golf dome)

### **Situation:**

The Braemar golf dome is being re-commissioned, a critical decision point in the future energy use of a building.

### **Background:**

The McKinstry report revealed the Braemar golf dome was the biggest consumer of energy per square foot of all municipal buildings in Edina. Data summaries of municipal building energy use supports the reality that on average the previous golf dome used 2-3 times the energy of the average building per square foot.

### **Assessment:**

See attachments

### **Recommendation:**

Given that the new golf dome will likely remain the largest energy using facility in the city, the Energy and Environment Commission advises City Council to direct the City Manager and Staff to include energy improvements, evaluate systems, and make equipment and construction decisions on ways to reduce overall energy use; Edina should not miss the opportunity to maximize energy efficiency or the opportunity to inform citizens about the importance of reducing energy use in buildings, especially high-energy use ones.

The dome should reduce overall energy usage and determine how to procure energy derived from solar collection and conversion systems or wind generated electricity for the energy usage that is above the per square foot average of the other municipal buildings. This would go a long way toward educating the public about the significant energy use of domed sport facilities; something that makes sense as the need to reduce our municipal energy usage and carbon footprint remains and as the dialog about another domed sport facility continues.

### **Routing**

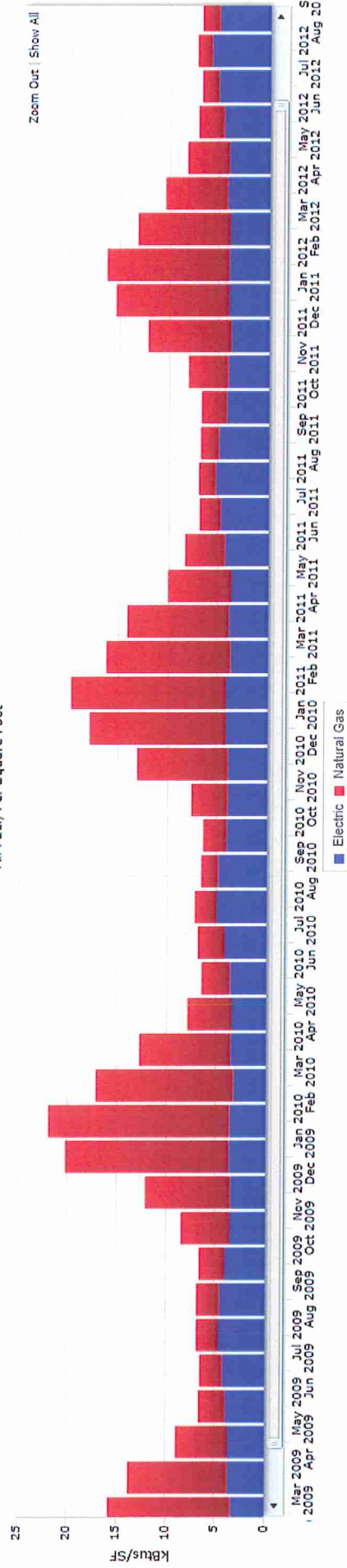
| <b>From</b> | <b>To</b>    | <b>Action Requested</b>               |
|-------------|--------------|---------------------------------------|
| EEC         | City Council | Include as correspondence to Council. |

# City, Edina - Consumption Report

Showing 20 of 20 Sites

10/22/2012

**Monthly Continuous**  
All Fuel, Per Square Foot



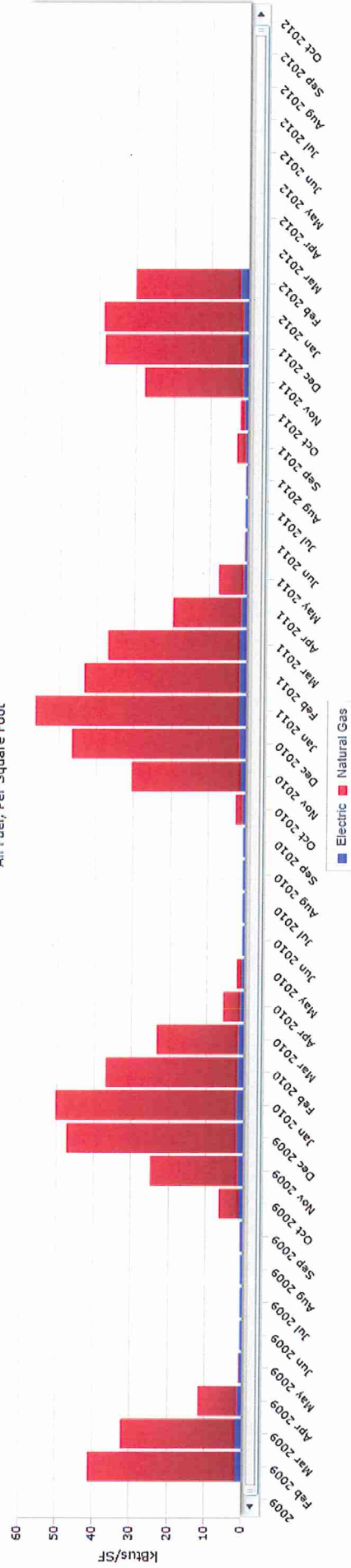
| Year | Days | SF       | Total<br>kbtu /SF | Target kbtu /SF | Change from<br>Target kbtu /SF | % Change | Total Energy<br>Cost \$ /SF | Average Cost<br>Rate \$ /kbtu |
|------|------|----------|-------------------|-----------------|--------------------------------|----------|-----------------------------|-------------------------------|
| 2009 | 365  | 594,219  | 119.55            | -               | -                              | -        | \$1.63                      | \$0.01                        |
| 2010 | 365  | 594,219  | 132.11            | -               | -                              | -        | \$1.85                      | \$0.01                        |
| 2011 | 365  | 594,219  | 131.95            | -               | -                              | -        | \$1.94                      | \$0.01                        |
| 2012 | 244  | 550,270* | 79.51             | -               | -                              | -        | \$1.28                      | \$0.02                        |

\*Listed square footage represents an average for the given year

# Braemar Golf Dome - Consumption Report

10/22/2012

**Monthly Continuous**  
All Fuel, Per Square Foot



| Year | Days | SF     | Total<br>kBtu /SF | Target kBtu /SF | Change from<br>Target kBtu /SF | % Change | Total Energy<br>Cost \$ /SF | Average Cost<br>Rate \$ /kBtu |
|------|------|--------|-------------------|-----------------|--------------------------------|----------|-----------------------------|-------------------------------|
| 2009 | 334  | 48,832 | 168.53            | -               | -                              | -        | \$1.44                      | \$0.01                        |
| 2010 | 365  | 48,832 | 199.60            | -               | -                              | -        | \$1.67                      | \$0.01                        |
| 2011 | 365  | 48,832 | 237.16            | -               | -                              | -        | \$1.77                      | \$0.01                        |
| 2012 | 171  | 4,883* | 69.00             | -               | -                              | -        | \$0.47                      | \$0.01                        |

\*Listed square footage represents an average for the given year